New Claims

1. Message analyser for analysing messages which are transmitted via service access points (8.1, 8.2, 8.3, 9.1, 9.2, 7.1, 7.2, 7.3) from layers (1, 2, 3, 4, 5) of an OSI reference model of an end system of a subscriber of a mobile telephone system, the message analyser (10) comprising

   a storage device (13) for storing messages,

   a selector (14) for reading in a sequence of temporally successive messages

   and a display device (15) for displaying at least one first region (16) and one second region (17),

   a sequence of messages, which is read in by means of the selector (14) from the storage device (13), being able to be displayed listed in the first region (16),

   characterised in that

   the selector (14) determines, for at least one service access point (7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2), a characteristic feature of the messages which are transmitted via this service access point (7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) and the course (26) of this characteristic feature can be displayed on the display device (15) in the second region (17).

2. Message analyser according to claim 1,

   characterised in that

the selector (14) determines a characteristic feature for messages which are transmitted via a plurality of service access points (7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) of a layer of the OSI reference model, and the course (26) of this characteristic feature can be displayed on the display device (15) in the second region (17) of the display device (15).

3. Message analyser according to claim 1 or 2,

characterised in that

the sequence of messages which is read in by means of the selector (14) is dependent upon a selection with which a specific point (32) of the course (26) of the characteristic feature can be selected in the second region (17).

4. Message analyser according to claim 3,

characterised in that

at least one specific point can be marked by a marking (33.1, 33.2, 33.3, 33.4) in the course (26) displayed in the second region (17) and, upon selection of the marking (33.1, 33.2, 33.3, 33.4), a sequence of messages which corresponds to the specific point is read in from the storage device (13).

5. Message analyser according to claim 3 or 4,

characterised in that,

on the basis of the additional items of information stored during storage of messages in the storage device (13), markings (34.1, 34.2) can be produced automatically by means of the selector (14).

6.   Message analyser according to one of the claims 1 to 5,

characterised in that

the course (26) of the characteristic feature can be displayed in the second region (17) in a coordinate system, the X axis (28) of which is a time axis.

7.   Message analyser according to claim 6,

characterised in that

the region of the course (26) displayed in the second region, which corresponds respectively to the sequence of messages currently displayed in the first region (16), is highlighted.

8.   Message analyser according to one of the claims 1 to 5,

characterised in that

the course of the characteristic feature can be displayed in the second region (17) in a coordinate system, the X axis (28) of which is subdivided into intervals with an identical number of messages.

9.   Message analyser according to one of the claims 1 to 8,

characterised in that

the characteristic feature is a number of transmitted messages per interval of time and/or a data load of a layer (1, 2, 3, 4, 5) of the OSI reference model and/or a number of messages transmitted repeatedly.

10. Method for analysing messages which are transmitted via service access points (7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) from layers (1, 2, 3, 4, 5) of an OSI reference model of an end system of a subscriber of a mobile telephone system and which are stored in a storage device (13), with the following method steps using a computer or a digital signal processor:

- reading in a sequence of messages by means of a selector (14) and

- display of the sequence of messages, which is read in by means of the selector (14), in tabular form in a first region (16) of a display device (15),

characterised in that

a characteristic feature of messages which are transmitted via at least one service access point (7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) is determined by means of the selector (14)

and a course of the characteristic feature is displayed in a second region (17) of a display device (15).

11. Method according to claim 10,

characterised in that

a characteristic feature of messages which are transmitted via a plurality of service access points (7.1, 7.2, 7.3, 8.1, 8.2, 8.3, 9.1, 9.2) of a layer (1, 2, 3, 4, 5) of an OSI reference model is determined by means of the selector (14).

12. Method according to claim 10 or 11,

characterised in that,

in the second region (17), a specific point (32) of the course (26) of the characteristic feature is selected and

in that a sequence of messages dependent upon the specific point (32) is read in by the selector (14).

13. Method according to one of the claims 10 to 12,

characterised in that,

in the second region (17), at least one specific point of the course (26) of the characteristic feature is marked by means of at least one marking (33.1, 33.2, 33.3, 33.4) and

upon selection of the marking (33.1, 33.2, 33.3, 33.4), dependent upon the specific point marked by the marking (33.1, 33.2, 33.3, 33.4), a corresponding sequence of messages is read in by means of the selector (14) from the storage device (13).

14. Method according to claim 13,

characterised in that,

during storage of the messages in the storage device (13), additional items of information are stored and

dependent upon these additional items of information, markings (34.1, 34.2) are produced automatically in the second region (17) by means of the selector (14).

15. Method according to one of the claims 10 to 14,

characterised in that

at least one characteristic feature is displayed in the second region (17) in a coordinate system, the X axis (28) of which is a time axis.

16. Method according to claim 15,

characterised in that

the region which corresponds respectively to the sequence of messages displayed in tabular form in the first region (16) is displayed highlighted in the second region (17).

17. Method according to one of the claims 10 to 14,

characterised in that

the at least one characteristic feature is displayed in the second region (17) in a coordinate system, the X axis (18) of which is sub-divided into intervals with an identical number of messages.